CD Databases

CMS Workshop
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Overview
System Administration

- ◆ System Administration
  - Hardware planning and support
  - Capacity Planning
  - Backup & Recovery
  - Monitoring
  - 24x7 support for mission critical systems
  - Security patches and general maintenance

Overview
Database Support

- ◆ Oracle (sun & linux)
- ◆ Freeware (linux)
  - ■ Postgres
  - ■ Mysql
- ◆ General Support

Oracle

- Oracle for mission critical databases
  - Oracle provides 24x7 technical support
  - Patches for upgrade and security
- Oracle Replication
  - Basic replication (soon to be replaced by streams)
  - Oracle streams

Freeware

- Postgres and mysql are supported by dsg.
- New versions in kits, actively assisting users with questions, upgrades, testing, etc. for freeware products.
- No 24x7 support, per vendor, and thus dsg. email support only
- Currently, no mission critical uses
- Lack of database constraints in mysql lay question to mysql's candidacy for mission critical applications.
- Reference url:
  http://www-css.fnal.gov/dsg/external/freeware

Database Support

- Design Consulting
  - What are my requirements?
  - What have others done? Can this be reused?
  - When does this database need to be in production?
- Database design via entity relationship diagrams
- Design Reviews
- Long term database support with mou

Database Support Cont.

- ◆ Which database will meet my requirements?
  - ▪ What is the potential size?
  - ▪ What will the activity level requirements?
  - ▪ What will the support level requirements?
- ◆ Standards and procedures http://www-css.fnal.gov/dsg/external/oracle_admin/run2_standards.html http://www-css.fnal.gov/dsg/external/oracle_admin/24x7_run_procedures_draft.htm

Database Support Cont.

- Long Term Support
  - Patches and upgrades
  - Space allocation
  - Monitoring
  - Backup and recovery
  - Replication

Man Power & Support

4 Sysadmins

4 Dbas

Currently supported experiments & infrastructure

- Cms
- D0
- Cdf
- Minos
- Miscomp
- CAD

DSG & BTEV

Please refer to http://www-css.fnal.gov/dsg/internal/BTeV/index.html for plans, projects and other past presentations about btev and databases. There is good background here!